

Heinrich Hertz. *Heinrich Hertz: Memoirs, Letters, Diaries.* Arranged by Johanna Hertz. Second enlarged edition prepared by Mathilde Hertz and Charles Susskind. English translation by Lisa Brinner, Mathilde Hertz, and Charles Susskind. In German and English. xxxvii + 361 pp., illus., bibl., name index. Weinheim: Physik Verlag; San Francisco: San Francisco Press, 1977. \$19.50.

The first edition of selections from Heinrich Hertz's diaries and letters to his parents was assembled by the scientist's elder daughter, Dr. Johanna Hertz, and published in 1927. A brief but vivid memoir of his childhood and early education, written by his mother in 1901, seven years after Hertz's death, was placed before the extracts. The present bilingual edition has been edited by Hertz's younger daughter, Mathilde, in collaboration with the historian of science Charles Susskind. Mathilde Hertz's preface explains the principles by which Hertz's parents used to determine the letters that they kept: "Whatever might have disturbed the picture of an ideal relationship—expressions of differences, of morbid thoughts and human weakness—would have been sorted out and destroyed; that seemed natural, even a duty to their way of thinking." Some of the missing features of her father's portrait are sketched in by Dr. Hertz, economically but expressively.

The English translation, although slightly stilted, greatly extends the usefulness of this second edition. This enlarged version is also provided with an index of names, a bibliography of Hertz's books and articles as they appeared in the *Collected Works*, and a somewhat revised and expanded choice of photographs. The added, short biography, which Max von Laue wrote in 1957, is of marginal interest. An essay on Hertz's science written specifically for this book and keyed into the elliptic notations from Hertz's diary, would have served the reader better. Systematic biographical notes on the persons who are mentioned would also have been helpful.

Despite these omissions, we can be grateful to the editors. This is a fascinating book with

appeal for the scientist, Hertz scholar, and historian of education. The diaries and letters paint lively vignettes of German education in the 1870s and 1880s. Among many others, for example, are depictions of Hertz's routine as an apprentice-engineer in Frankfurt, of the formalities of his Berlin doctor's examination with its round of preliminary visits, and of his private visit to the Prussian minister of education, in which the now famous young professor fought to make room for his own personal preferences as the minister instructed him on which university chairs to refuse and which to consider. Again, the story of his relation to his science, emerging from this record through the medium of Hertz's sensitive self-scrutiny, is moving and wonderful. The lengthy, urgent letter in which the twenty-year-old student both begs and demands his parents' acquiescence in his decision to change his course of studies from engineering to physics is a highlight.

JOAN BROMBERG

428 Girard Street

Gaithersburg, Maryland 20760